

REMARKS

Claims 1-15 remain pending in the application.

Claims 1-15 over Havinis in view of Lam

Claims 1-15 were rejected under 35 U.S.C. §103(a) as allegedly being obvious over U.S. Patent No. 6,219,557 to Havinis in view of U.S. Patent Application Publication No. 2003/0072318 to Lam et al. ("Lam"). The Applicant respectfully traverses the rejection.

Havinis's patent basically teaches a method to allow a GPRS network to establish "special" GPRS PDP context (i.e. IP connectivity) for LCS service, in which he assumes the overall system (i.e. control plane, including the GPRS radio protocol stack, see the protocol architecture below) knows the service request is for LCS service. This is fine for Control Plane based location services, but it is not a valid assumption for User Plane based location services. Havinis' patent was written at a time when GMLC, only one associated with a specific mobile station, is responsible for retrieving location for all the location requests targeting the mobile station. In contrast to Havinis, Applicants' claimed features are drawn to a novel roaming concept, i.e., when roaming only the local visited GMLC can provide location services, the H-GMLC has to go through the V-GMLC, and the interface between H-GMLC and V-GMLC will be IP based. Due to these differences, Havinis lacks any relevance to Applicant's claimed features.

Claims 1-15 recite establishing a roaming interface between a wireless device and a visited location service (V-LCS) manager via an intermediary home Location Services (H-LCS) manager associated with the wireless device.

The Examiner alleges that the "Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection." (see Office Action, page 3) However, the Office Action dated November 15, 2007 repeats the rejection of claims 1-15 over Havinis in view of Lam. Accordingly, Applicant respectfully traverses the Official Action as incomplete because it fails to answer the material traversed. (See MPEP

§707.07(f) "Where the applicant traverses any rejection, the examiner should, if he or she repeats the rejection, take note of the applicant's argument and answer the substance of it."). Should the Examiner not find the arguments included herein persuasive, he is respectfully requested to provide a NON-FINAL Office Action responding to the Applicant's arguments so that the Applicant can fully address the Examiner's rejection.

The Examiner **again** alleges that Havinis discloses establishing a roaming interface for a wireless device in Figures 4 and 5, and their respective descriptions (see Office Action, page 2). However, as pointed out in the Response filed on October 17, 2007 and the Examiner has yet to supportably refute, Havinis' teaches use of a new LCS transaction type in a Connection Management(CM) sub-layer of General Packet Radio Service (GPRS) in the Serving GPRS Support Node (SGSN) and a GPRS Mobile Station (MS) to handle request for Location Service (LCS) in parallel to other offered services (see Havinis, col. 3, lines 23-28). Thus, Havinis' invention is directed toward a new LCS transaction type not disclosed as having any application to a wireless device while it is roaming, much less establishing a roaming interface between a wireless device and a visited location service (V-LCS) manager, as recited by claims 1-15.

Moreover, as pointed in the Response filed on October 17, 2007 and the Examiner has yet to supportably refute, Havinis fails to disclose any application to a wireless device while it is roaming, much less a visited location service (V-LCS) manager as claimed. The Examiner alleges that Havinis discloses a visited location service (V-LCS) manager at item 270, but Havinis specifically discloses item 270 is a **Mobile Location Center (MLC)**. Havinis fails to disclose the MLC has anything to do with a visited network, i.e, while a wireless device is roaming. Thus, Havinis fails to disclose establishing a roaming interface between a wireless device and a visited location service (V-LCS) manager, much less via an intermediary home Location Services (H-LCS) manager, as recited by claims 1-15.

The Examiner acknowledges that Havinis fails to "teach directing IP connectivity over the internet capable of being transmitted through a firewall in a home wireless carrier network and through a firewall in a visited wireless carrier network (see Office Action, pages 2 and 3). The Examiner relies on Lam to allegedly make up for the serious acknowledged deficiencies in Havinis to arrive at the claimed features.

In particular, The Examiner **again** alleges that Lam teaches "that it is well known to use firewalls between home carrier networks and visited carrier networks, as shown for example in fig. 1, in which a firewall is shown in use with SGSN and GGSN." (see Office Action, page 3). However, Lam's SGSN is a Serving GPRS Support Node and GGSN is a Gateway GPRS Support Node (see paragraph [0019]). Lam's SGSN and GPRS are not disclosed as having any relevance to a wireless device while it is **roaming**, i.e., much less having any relevance to a firewall in a visited wireless carrier network, as recited by claims 1-15.

As pointed out to in Applicant's Response filed on October 17, 2007 and has yet to be supportably refuted, Lam discloses in paragraph [0019] that the "SGSN 115 also maintains location information relating to MN 105." Lam only describes a single component containing location information, the SGSN. Lam's patent is directed toward optimizing the routing and QoS control for IP traffic of GPRS PDP context (IP link), with no teachings of how the IP traffic (e.g. User Plane LCS traffic) can be routed back to a visited network from a Home network. Lam fails to teach any application to a wireless device while it is roaming, i.e., a visited carrier network, much less two location managers, establishing a roaming interface between a wireless device and a visited location service (V-LCS) manager, much less via an intermediary home Location Services (H-LCS) manager, as recited by claims 1-15.

Havinis in view of Lam, either alone or in combination, would still fail to disclose, teach or suggest establishing a roaming interface between a wireless device and a visited location service (V-LCS) manager, much less via an

intermediary home Location Services (H-LCS) manager, as recited by claims 1-15.

For these reasons alone claims 1-15 are patentable.

Moreover, claims 1-10 recite directing IP connectivity over a roaming interface between a home LCS manager and a visited LCS manager through a firewall in a home wireless carrier network and through a firewall in a visited wireless carrier network.

The Examiner alleges that Lam teaches "that it is well known to use firewalls between home carrier networks and visited carrier networks." (see Office Action, page 3). But, Lam fails to teach any application to a wireless device while it is roaming, i.e., a visited carrier networks.

As discussed above, Lam only describes a single component containing location information, the SGSN. Lam fails to disclose two location managers, much less directing information between two location managers through two firewalls, i.e., directing IP connectivity over a roaming interface between a home LCS manager and a visited LCS manager through a firewall in a home wireless carrier network and through a firewall in a visited wireless carrier network, as recited by claims 1-10.

Thus, Havinis in view of Lam, either alone or in combination, still fails to disclose, teach or suggest establishing a roaming interface between a wireless device and a visited location service (V-LCS) manager via an intermediary home Location Services (H-LCS) manager associated with the wireless device, and directing IP connectivity over a roaming interface between a home LCS manager and a visited LCS manager through a firewall in a home wireless carrier network and through a firewall in a visited wireless carrier network, as recited by claims 1-10.

Havinis fails to disclose, teach or suggest any need for two firewalls AND IP connectivity. There is no reason why a person skilled in the art would have had **BOTH**.

For these additional reasons, claims 1-10 are patentable.

Furthermore, claims 11-15 recite that a message tunneling mechanism is formed between a visited location service (V-LCS) manager and a wireless device being located.

As discussed above neither Havinis nor Lam have any application to a wireless device while it is roaming, much less disclose a visited location service (V-LCS) manager. Thus, it would follow that Havinis and Lam fail to disclose a message tunneling mechanism is formed between a visited location service (V-LCS) manager and a wireless device being located, as recited by claims 1-15. Thus, Havinis in view of Lam, either alone or in combination, would still fail to disclose, teach or suggest establishing a roaming interface between a wireless device and a visited location service (V-LCS) manager via an intermediary home Location Services (H-LCS) manager associated with the wireless device; and a message tunneling mechanism formed between a visited location service (V-LCS) manager and a wireless device being located, as recited by claims 11-15.

For at least these reasons, claims 1-15 are patentable over the prior art of record. It is therefore respectfully requested that the rejection be withdrawn.

Conclusion

All objections and rejections having been addressed, it is respectfully submitted that the subject application is in condition for allowance and a Notice to that effect is earnestly solicited.

Respectfully submitted,



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